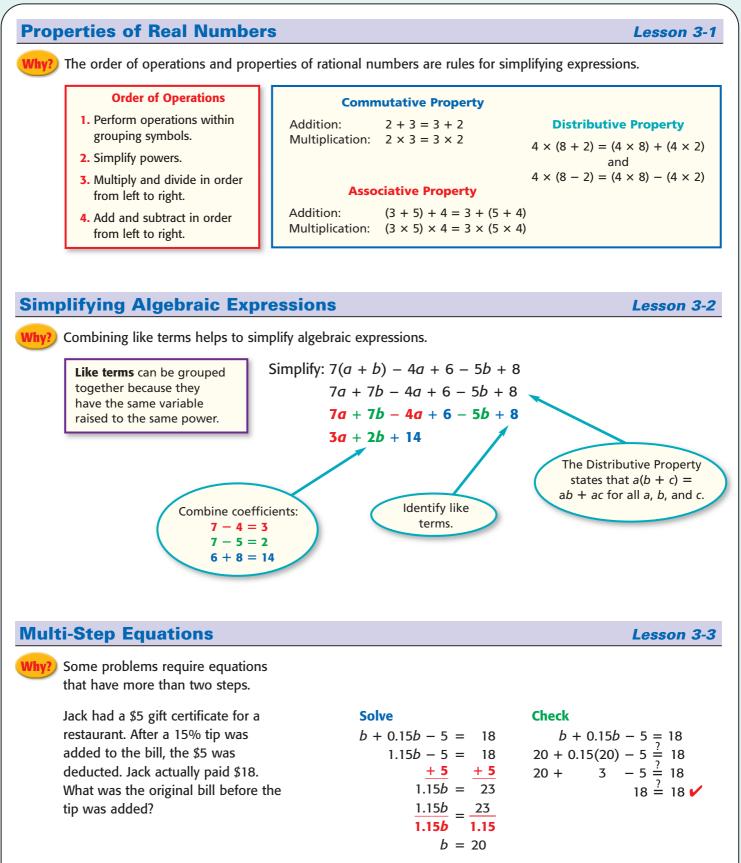
## **Section Overview**





The original bill was \$20.

## **Section Overview**



Lesson 3-4

## **Equations with Variables on Both Sides**

Why? A problem may require an equation that has a variable on both sides of the equal sign.

The members of a book club spend the same amount for refreshments at each meeting. At one meeting they bought 6 bagels and spent \$9.90 on beverages. At the next meeting they bought 8 bagels and spent \$8.20 on beverages. What was the cost of each bagel?

Solve	
6 <i>x</i> + 9.90	= 8x + 8.20
- <b>6</b> x	- 6x
9.90	= 2x + 8.20
<u>- 8.20</u>	- 8.20
1.70	= 2x
1.70	= 2x
2	2
0.85	= x

6x + 9.90 = 8x + 8.20  $6(0.85) + 9.90 \stackrel{?}{=} 8(0.85) + 8.20$   $5.10 + 9.90 \stackrel{?}{=} 6.80 + 8.20$  $15 \stackrel{?}{=} 15 \checkmark$ 

The cost of each bagel was \$0.85.